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INDUSTRIAL INSURANCE
VIII
INSURANCE PLANS OF RAILROAD CORPORATIONS

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Even if afterward we give separate treatment to special branches of the insurance of railway employees—accident, sickness, death benefits, pensions, and superannuation—it seems wise at first to treat each system as a whole. It is difficult to separate the items, and the companies themselves bring the various branches under a common scheme and administration, each part being understood only as it is considered in relation to all others. It is in this way that Riebenack goes to work in presenting the results of his valuable studies to which in this chapter we are so deeply indebted, although independent studies have been made with other sources, and some of the conclusions reached are different from his.¹

According to official statements² there were in this country, on June 30, 1902, 202,471.85 miles of railroads. In 1892 there were only 171,563.52 miles. The number of “steam-railroad employees” reported by the census of 1900 was 461,909 males, 149,230 females; total, 611,139. Riebenack gives the mileage for 1903 as 205,000 and the employees as 1,312,537, but he includes persons of all classes who are engaged in this occupation. His own study covered railroads with a mileage of 73,351.76, with their 653,267 employees. This means 35.8 per cent. of total mileage and 49.7 per cent. of employees. His work is based on returns from 140 railroad companies, 64 having

¹ See *Railway Provident Institutions in English-Speaking Countries*, by M. Riebenack, comptroller of the Pennsylvania Railroad Company (Philadelphia, 1905); pp. 31, 357, and index. The reports used by Mr. Riebenack, are for the year 1903. Since his study was made many changes have been made in some of the companies. Materials are not easily accessible to bring details up to date.

² *Statistical Abstract of the United States*, 1903, pp. 403, 495.

made no response to requests for information. The volume contains much interesting information about other forms of "welfare work" with which we are not here concerned.

A summarized statement of the results of this important study is thus given:

The nine purely relief department roads hereinbefore discussed represent an aggregate of 31,000 miles of roadway, or about 15 per cent. of the total railway mileage of the United States, with employees numbering 318,000, or about 24 per cent. of the total number of railway employees in the country, and an insurance membership of 206,000 employees, or practically 65 per cent. of the total number of employees identified with the service of the roads involved. The combined average annual disbursements of these departments aggregate about \$2,230,000, while their combined disbursements since organization approximate \$37,150,000.³

The railroad companies in the United States have made thus far the most important contribution to the promotion of industrial insurance. They are under the control of men who have large views and highest ability. Mr. Bryce says of these men: "these railroad kings are among the greatest men, perhaps I may say the greatest men in America."⁴ The long life of these corporations is also favorable to large and permanent schemes of betterment, and if we add the enormous resources of the companies we may account for their leadership in this field.

Hospital service.—This is the most primitive form of relief. The necessity of having surgical and medical help at hand at all times was forced upon the attention of railroads at an early period. The first hospital department was established by the Southern Pacific Railroad in California in 1868, though before that time companies were obliged by circumstances to make arrangements for emergencies with physicians and private hospitals. Riebenack received reports from 35 railway companies with hospital organization, representing an aggregate of about 70,000 miles and 360,000 employees, and treating annually over 275,000 cases. Ten of these companies report that they make payments for this service, either to their own hospitals or to others under contracts, out of purely railway revenue. The cost

³ Riebenack, *op. cit.*, p. 77.

⁴ *The American Commonwealth*, Vol. II, pp. 530-53, 2d ed.

of hospital service to the Pennsylvania system during the year ending December 31, 1903, was \$20,567.50. The rates paid by employees are from 25 cents to \$1.00 per month. The company usually provides hospital buildings, free transportation, and occasionally supplies "operative deficiencies." The medical staff is organized under a chief surgeon or physician with division and local surgeons and physicians distributed at convenient points along the lines of road, and a corps of hospital surgeons. Specialists are employed when desirable. Under these arrangements the fees paid are simply for medical services; in case of injury the damages are settled by agreement or litigation. Occasionally the members of families of members are received for treatment in the company hospitals at reduced rates. Some attention is given to providing first aid to the sick and injured by lectures from medical men to groups of employees and by placing packets of bandages, medicines, etc., at convenient points ready for use.

Insurance in private companies.—After hospital service the next step forward toward an adequate insurance system has been taken by those roads which secure favorable terms for life insurance with private companies. The railway companies, by the use of their authority as employers and by directions given to their clerical force are able to save much of the cost of solicitation and collection of premiums. They are thus in a position to secure better terms than an individual employee could do, and their own contribution of collection, sometimes with a moderate subsidy, facilitates the process and diminishes the burden on the employees. Several forms of this experiment may be cited.

In some cases the company merely arranges for a canvass of solicitation by agents of the insurance companies. The Bangor and Aroostook Railroad Co., with its 412 miles, and 1,320 employees, is in this group. The Illinois Central Railroad (4,301.10 miles, 34,249 employees) secured favorable rates from reliable accident insurance companies. The Norfolk and Western Railroad Co. (1,722 miles, 15,394 employees) has a similar plan. The employees are classified according to the risk

to which they are exposed from "select" to "special hazardous." The ordinary indemnities are: \$500 death benefit or \$2.50 weekly indemnity, as a minimum, and \$1,000 death benefit or \$5 weekly allowance, as a maximum. Higher amounts may be insured in less hazardous classes. The company collects the premiums by deduction from the payroll. On February 1, 1904, 3,865 out of a total of 15,394 employees held some insurance.

Similar plans are those of the Texas and Pacific Railroad Co. The premiums range from \$10.20 to \$61.20 per annum; weekly indemnity, \$5 to \$25 per week; death benefit, \$500 to \$5,000. The railroad deducts premiums from the payroll and receives commission of 5 per cent. Out of 8,177 employees only 1,250 are insured.⁵ The Cincinnati, New Orleans and Texas Pacific Railway Co., in addition to securing death benefits and accident indemnity, also has sickness insurance covered by the same premium. Various forms of policy are offered. It is estimated that the private company is saved about 41 per cent. of the cost of business, since it has no expense for soliciting and collecting premiums; and hence it can give lower rates. The "health" insurance costs \$6.00 per year for each \$5.00 of weekly sick benefit applied for. At the close of 1903 only 517 employees out of 5,338 were insured, and these carried \$780,100 for death benefits and \$7,097 for monthly indemnity. The annual receipts, \$12,633.48, were made up of \$11,761.92 contributions of employees and \$871.56 by the company.

In some cases the company pays a part of the premium. Thus the Chicago and Alton Railroad (915 miles; 7,339 employees) in 1899 made a contract with an insurance company for a life and accident policy, agreeing to pay one-half the premiums for the hazardous classes and 30 per cent. for the non-hazardous. This plan seems to have been abandoned on the ground that the insurance company could not carry the risk at rates agreed. The Union Pacific Railroad (2,933.7 miles, 15,338 employees) on January 1, 1901, agreed to pay one-third the premiums of the hazardous and one-fourth of the premiums of the other classes.

⁵ Riebenack, *op. cit.*, p. 24.

We find a different type of insurance where the railroad company itself conducts an accident-insurance business and in addition settles on an equitable basis for injuries which might fairly be supposed to involve legal liability. The Chicago and Eastern Illinois Railroad, in June, 1893, organized a scheme for issuing policies securing benefit in case of accident or death. Persons over 65 years of age are debarred from participation, unless they have come to that age in the service of the company. The premiums paid are: for office men, station men, passenger conductors, tower men, and flag men, one-half of 1 per cent. of wages; freight-train men and switchmen, 2 per cent. of wages; all others, 1 per cent. of wages. The benefits are: for disability due to accident, one-half of usual wages not exceeding 50 weeks, the total not more than \$1,000; for death benefit, one-half of wages of one year not exceeding \$1,000, with funeral expenses and physician's bill, not to exceed \$1,000; deductions being made for previous payments on indemnities. The company gives free surgical attendance, makes good deficiencies in the fund, and administers the business.⁶ The object is to provide sound accident insurance at lowest cost. By reason of their employment, the hazard of accident resulting in personal injury is so great that the premiums charged by the ordinary casualty company are almost prohibitive, and only a small percentage of the higher-priced railroad men can afford to pay these rates. The ordinary accident policy is "provided with so much red tape and contains so many conditions precedent that the collection of benefits is usually the result of some kind of compromise, so that the employee is practically without protection, and without protection he usually becomes a charge on the company," says Mr. H. F. Jones, the administrator of the plan. At first the plan was optional, and the men could accept or decline membership. So many of the employees availed themselves of the opportunity that to facilitate the handling of matters pertaining to it, it was made compulsory in May, 1895, with all employees except those in non-hazardous branches of the service. The premiums are deducted from the payroll and the benefits are paid monthly as the wages

⁶ Riebenack, *op. cit.*, p. 20.

are paid. The experience of the company is that the scheme has reduced suits by employees to a minimum and given to the employees much more than they would have been paid if they had entered suit. By careful attention to preventive and first-aid devices and prompt medical help the number of accidents and the duration of disabilities have been considerably reduced. Gratuitous contributions have ceased. After the first shock of the hurt abates the employee who is injured has a better feeling toward the company on account of the prompt and substantial indemnity paid. The plan is advantageous to all parties concerned.

Philanthropic endowments.—The one conspicuous example of this type is the Andrew Carnegie Fund. On March 12, 1901, Mr. Carnegie gave to the Carnegie Company, Pittsburgh, Pa., \$4,000,000 in trust, the interest to be applied in providing relief for employees of the Carnegie Company in all its works, mines, railways, shops, etc., and for those dependent upon such employees who are killed; also to provide small pensions or aid to such employees as, after long and creditable service, need such help in their old age. On December 31, 1903, the report mentioned 284 cases of accident, 168 deaths, 189 pensioners. Total disbursements, \$228,866.02. The Bessemer and Lake Erie Railroad Company (207 miles, 2,676 employees) comes under this trust, the "Andrew Carnegie Relief Fund." Employees are not required to contribute to the fund. The accident benefits are: 75 cents per day for 52 weeks to an unmarried man, and one-half this rate afterward. Married men receive \$1.00 per day, with an additional benefit of 10 cents for each child under 16 years of age; one-half rates after 52 weeks. Death benefits: maximum payment, \$1,200. Deficits in the fund are met by ratable reductions in the allowances. Total disbursements amount to \$9,168.75; accident benefits to \$4,788.75; death benefits to \$4,380.00.⁷ Some visitors in the region where the fund is administered have the conviction that the fund is somewhat abused by malingerers.

Still another type is that of mutual insurance associations of

⁷ Riebenack, *op. cit.*, p. 30.

employees. The employees of the Ann Arbor Railroad Co. (291.9 miles, 1,563 employees) in 1899 formed an association for mutual insurance. The company itself assumes no responsibility. The membership in 1903 was 850 (out of a total of 1,563). The premiums are graded according to the hazard of occupation. The minimum premium for station agents and clerks is 25 cents per month, with a weekly indemnity of \$5 and a death benefit of \$1,000. The maximum premiums and allowances are: for firemen and engineers, \$1.62 per month assessments, weekly indemnity \$10, death benefit, \$2,000; for freight brakemen and switchmen, \$1.74 monthly assessments, \$7 weekly indemnity, \$700 death benefit. The premiums and indemnities of the sick fund are: a premium of 35 cents per month gives a weekly indemnity of \$5; 50 cents gives a weekly indemnity of \$7.50; 70 cents gives \$10. A funeral benefit of \$100 in case of death from causes other than accident is paid. Premiums are deducted from the monthly payroll. The receipts during the year 1903 were \$11,686.20.

The employees of the Cincinnati, Hamilton and Dayton Railroad Co. (1015.09 miles, 5,449 employees) organized an association in 1876, which has a membership of 1,610. There are two classes of members: those who pay \$1 assessment on the death of a member and receive a death benefit of \$500; and the other who pay \$2 and receive \$1,000. Accident benefits are \$5 per week in case of injury in Class A, while in Class B a benefit of \$1,000 is paid for loss of both legs, both eyes, both arms, or one leg and one arm. The average annual mortality has been 12.4 per thousand.

Regular relief departments.—These organizations represent the most complete methods of sickness and accident insurance known in the United States. The old-age and disability pension schemes will be considered separately. The employees of the Baltimore and Ohio Railroad Co. took the initiative in insurance schemes with their relief organization on May 1, 1880. This was practically a mutual insurance association. But the first railroad corporation to organize a relief department of its own, according to Riebenack, was the Pennsylvania Company,

on February 15, 1886. The Baltimore and Ohio company established its relief department April 1, 1889. These schemes have served as models for others.

We take the Pennsylvania Railway Relief Department as a typical example for detailed description, and it will not be necessary to give so much space to others formed on the same pattern though differing in some particulars. The Pennsylvania system east and west of Pittsburgh has 10,913.89 miles and 172,024 employees; east, 5,852.44 miles, 117,928 employees; west, 5,061.45 miles, 54,096 employees. Branch lines are included in the system. From the year 1874 the employees had urged the management to consider the subject, but only in 1886 (February 15) was a plan organized under the title, "The Pennsylvania Railroad Voluntary Relief Department." This was the first absolutely independent relief organization in the United States for railroad employees. The relief department for lines west of Pittsburgh was established July 1, 1889. Both plans are on essentially the same basis and may be described together. The object is to provide definite benefits to members disabled by accident or sickness, or to their dependent relatives in case of death.⁸

The contributions of the company.—The railroad corporation guarantees the fulfilment of the obligations assumed, takes charge of funds, is responsible for their safe keeping, supplies facilities, and pays expenses of administration (including salaries of officers, medical examiners, clerical force), pays interest on monthly balances, and approves securities of investments. The company administers by a superintendent with assistants. The general supervision is vested in an advisory committee, seven of whose members are elected by members.

Membership.—All classes of employees are eligible. The maximum age for entrance to the service of the company is 35 years, except where professional qualifications are required. The employee forwards his application for membership to the relief department and, after medical examination, signs a form of contract. Any employee under 45 years of age may become a member if he passes a satisfactory medical examination.

⁸ Riebenack, *op. cit.*, pp. 60-72.

The total membership on December 31, 1903, was 104,151, out of 172,024 employees. The following table shows the membership by classes:

TABLE I

CLASS	LINES EAST			LINES WEST		
	Workmen	Members	Percentage of Members	Workmen	Members	Percentage of Members
Officials, etc.	24,093	15,833	66	7,988	4,436	56
Telegraphers.	2,702	1,878	70	1,340	985	74
Conductors.	3,606	2,969	82	1,508	1,394	92
Brakemen.	13,087	11,352	87	3,213	3,027	94
Engineers.	4,403	3,487	78	2,198	2,062	94
Firemen.	4,779	4,381	92	2,328	2,260	97
Switchmen.	4,180	3,637	87	3,515	3,018	86
Machinists.	27,612	18,990	69	10,587	8,894	84
Station agents.	24,745	13,301	54	7,586	1,908	25
Irregular workmen..	1,001	679	68			
Total.	110,327	76,507	69	40,263	27,984	70

Membership payments are fixed and uniform without reference to occupation, and differences are based on wage classification, as will be seen in Table II.

TABLE II

Class	Lines East Monthly Earnings	Lines West Monthly Earnings	Monthly payments
I.	Less than \$35	Not over \$40	\$0.75
II.	\$35 to \$55	\$40 to \$60	1.75
III.	55 to 75	60 to 80	2.25
IV.	75 to 95	80 to 100	3.00
V.	95 upwards	Over \$100	3.75

An employee is permitted to change from one class to another within certain defined limits.

TABLE III
SHOWING BENEFITS ACCORDING TO CLASSES

	1st Class	2d Class	3d Class	4th Class	5th Class
Accident—					
Daily indemnity up to 52 weeks.	\$0.50	\$1.00	\$1.50	\$2.00	\$2.50
After 52 weeks.	0.25	0.50	0.75	1.00	1.25
Sickness—					
Up to 52 weeks, after 3 days	0.40	0.80	1.20	1.60	2.00
After 52 weeks.	0.20	0.40	0.60	0.80	1.00
Death benefit.	\$250	\$500	\$750	\$1,000	\$1,250

The company occasionally, in meritorious cases, extends the relief beyond 52 weeks out of its own funds as a gratuity. Funeral expenses are paid out of death benefits. The average annual mortality rate per thousand members has been 12.6 (east) and 12 (west).

The income of the relief fund is from these sources: membership contributions; company appropriations, when necessary, to make up triennial operative deficits; income and profit arising from investment of money on hand; gifts and legacies; free use of buildings, transportation, and other facilities supplied by the company for conducting the department business; relief from all operating expenses which are borne by the company. In the event of a surplus, at the end of any three-year period of operation, after allowing for liability incurred and not paid, such surplus is devoted exclusively to promote a fund for the benefit of superannuated members, or in some other manner for the sole benefit of members of the relief fund.

The total receipts since the establishment of the department have been \$19,950,940.94, made up as follows:

LINES EAST OF PITTSBURGH	
From membership	\$11,672,717.39
From the Company	2,544,348.11
From other sources	422,027.04
Total receipts east of Pittsburgh	\$14,639,092.54
LINES WEST OF PITTSBURGH	
From membership	\$4,342,321.95
From the Company	969,526.45
Total receipts west of Pittsburgh	\$5,311,848.40
Aggregate receipts of Pennsylvania system	\$19,950,940.94

The average receipts per annum for lines east of Pittsburgh, \$813,282.91; and for lines west of Pittsburgh, \$404,554.73, or a total each year of \$1,217,837.64.

The total disbursements since the establishment of these funds have been:

LINES EAST OF PITTSBURGH

For accident	\$2,246,454.10
For sickness	4,455,618.80
For death	4,851,434.88
For operating expenses	1,815,641.54
For superannuation allowances	148,662.15
Total	<u>\$13,517,811.47</u>

LINES WEST OF PITTSBURGH

For accident	\$1,162,281.65
For sickness	1,473,124.60
For death	1,687,241.22
For operating expenses	754,607.81
Total	<u>\$5,077,255.28</u>
Total disbursements of entire system	\$18,595,066.75

The average disbursements per year, for lines east of Pittsburgh, have been \$750,989.53, and for lines west of Pittsburgh \$381,260.40, or an aggregate of \$1,132,249.93 for the entire system.

The advantages claimed for the relief department over the older conditions are: Indemnity is provided in case of disablement from accident or sickness and death from accident or natural causes, at minimum cost. The cost of insurance in regular companies is ordinarily prohibitive for those in hazardous branches of railroad employment. Free surgical attendance is furnished in case of injury received during the performance of work for the company, and artificial limbs are supplied and other similar articles needed by injured persons. There is no fee for entrance nor for medical examination, nor any special dues, taxes, or assessments. The member is exempt from paying dues during disablement except for the month in which the injury occurred. There is no danger of forfeiting insurance from non-payment of dues, since these are collected from the payroll so long as the member is at work. All expenses of administration are paid by the company, so that contributions are devoted entirely to payment of benefits. Death benefits cannot be taken for debt, payments being made only to designated beneficiaries. Neither employees nor employers are troubled by

subscription solicitors for disabled men, as was the case before this plan went into effect.

A surplus fund from the relief department east of Pittsburgh accumulated since 1886 amounted to \$751,256.25, the interest on which is devoted to superannuation allowances. From this fund 1,408 retired members have received \$148,662.15; the expenditures in 1903 were \$43,875.12. On lines west of Pittsburgh no surplus has been accumulated, and so no superannuation payments have been made. Of pension schemes mention will be made later.

The Baltimore and Ohio Railroad system.—This company, with its 4,410 miles of way and 55,688 employees, was one of the first to organize insurance for its employees. An association of employees was formed May 1, 1880, and the company itself established a relief department March 16, 1889. Out of 20,606 members of the old association 19,467 joined the new department. The company annually gives \$6,000 to the relief fund, or, when it is not needed there, to the pension fund. It contributes \$10,000 annually for medical examinations; provides office room and furniture; gives the services of officers in administration; is responsible custodian of the funds; and guarantees payments of rates promised. The company endeavors to provide partially disabled employees with occupation suited to their abilities. This company has three forms of benefits—relief, pensions, and savings schemes; here we consider only the first. While the administration is conducted by the company there is an advisory committee on which the employees are represented. Members are classified according to wages.

TABLE IV

WAGE CLASS	MONTHLY DUES		DAILY BENEFITS			DEATH BENEFITS		
	1 Div.	2 Div.	Accidents		Sickness	Accident	Sickness	
							Ordinary	Max.
			26 Weeks	After				
A, up to \$35.....	\$1.00	\$0.75	\$0.50	\$0.25	\$0.50	\$ 500	\$ 250	\$1,250
B, \$35 to \$50....	2.00	1.50	1.00	0.50	1.00	1,000	500	1,250
C, \$50 to \$75....	3.00	2.25	1.50	0.75	1.50	1,500	750	1,250
D, \$75 to \$100...	4.00	3.00	2.00	1.00	2.00	2,000	1,000	1,250
E, over \$100....	5.00	3.75	2.50	1.25	2.50	2,500	1,250	1,250

The benefits for disablement are not paid for Sundays and holidays. The higher rates for accidents are paid during the first 26 weeks and then the lower during the subsequent disability. Sickness benefits are paid after the first week for 52 weeks. The death benefits where death is due to sickness are ordinary and maximum as shown in the table.

Employees not exposed to special risks of accidents may insure for natural death benefits only, or for both natural death and sick benefits at 25 cents per month, which is also the cost of additional natural death benefits. The modes of payment are made quite flexible to be adapted to various incomes and hazards. Membership is said to be voluntary though preference is given in the retention of employees to those who belong to the relief department. No person over 45 years of age is admitted to membership without approval of the president of the company.

The total receipts since the establishment of the plan have been \$9,520,628.80; of which membership payments furnished \$8,730,415.40, the company paid \$344,590.75, and other sources \$445,622.65. The average receipts per year have been \$410,962.38. The receipts for the year ending June 30, 1903, were \$775,646.43; from members, \$712,595.82; from company for operating expenses, \$10,000; reserve fund, \$6,000; interest, \$35,115.04; bonds redeemed, \$10,000; miscellaneous, \$1,935.57. Total disbursements since the beginning, \$8,691,061.88; for accident benefits, \$1,468,259.96; sickness, \$2,257,336.38; death, \$3,781,304.95; operating expenses, \$931,373.04; other \$252,787.55; average disbursement per annum, \$375,153.75. Disbursements for the year ending June 30, 1903, were, \$732,102.97; for death benefits, \$178,500.00 (accidents); death benefits (natural causes), \$152,090.00; disablement from accident \$129,362.00; disablement, sickness, \$178,867.38; surgical expenses, \$14,909.81; refunded to members, \$12,274.68; advances, \$2,564.80; operating expenses, \$68,076.18. The total membership June 30, 1903, was 41,783, or about 90 per cent. of the entire working force of the company. The total membership is divided between hazardous and non-hazardous occupations; the

former include 28.75 per cent. and the latter 71.25 per cent. The surplus funds at the close of each fiscal year are used either to reduce the next year's contributions, or to increase the amount payable for natural death or to increase pensions.⁹

The Cleveland Terminal and Valley Railroad Co. (88.38 miles, 1,088 employees) has a department closely akin to the Baltimore and Ohio Relief Department. The total receipts from membership dues during 1903 were \$17,148.65. Total disbursements during 1903 were \$9,304.42; for accidental deaths, \$2,000; for natural deaths, \$500; disablement from accident, \$3,126.67; disablement from natural causes, \$3,-094.95; surgical expenses \$582.80. The number of members was 995 (399 in hazardous class and 596 in non-hazardous class).

The Philadelphia and Reading Railway Co. established its relief association October 30, 1888. The contributions and benefits are the same as those of the Pennsylvania system. An additional \$100 is paid with each death benefit out of the surplus fund without regard to class. The yearly surplus is used for the superannuation fund or in some other way for the benefit of the members. The maximum age for admission to membership is 45 years. Benefits are not paid longer than 52 weeks, but the claim to death benefit does not cease with that period. The employee loses his rights when he ceases to be an employee, except that if he has been a member 3 years he may retain rights in the death benefit. The company contributes 5 per cent. of the amount paid by employees and makes good deficiencies in funds if there are any. The total receipts since establishment of the fund have been \$4,049,494.11; from members, \$3,362,678.05; from company, \$443,831.68; other sources, \$242,984.38; average receipts per year, \$269,966.28; receipts for the year ending November 30, 1903, \$299,940.11. The total disbursements since the beginning have been \$3,596,727.96; for accidents, \$880,574.66; sickness, \$895,794.16; death, \$1,-436,708.05; operating expenses, \$375,077.25; other, \$8,-575.84; average annual disbursements, \$241,765.54. Disburse-

⁹ Riebenack, *op. cit.*, p. 46.

ments for the year ending November 30, 1903, were \$292,423.41; for death benefits, accidents, \$46,250.00; death, natural causes, \$64,550.00; accidental death, from surplus fund, \$10,200.00; death from natural causes, from surplus fund, \$15,100.00; death benefits to former employees, \$3,500.00. The total death benefits were \$139,600.00. Disablement benefits were for accidents, \$65,152.50; natural causes, \$70,016.30; surplus fund, \$316.20 (accidents); surplus fund (natural causes), \$651.90; total, \$136,136.90. Salaries and expenses of medical examiners were \$16,186.51. The expenses of operating the association during 1903 were \$33,658.40, of which the company paid \$17,471.89 and the relief fund paid \$16,186.51. The company also contributed \$12,955.02 to the fund—\$30,466.91 in all. The average annual mortality per 1,000 members was 12.1. The membership on November 30, 1903, was 18,951, or 80 per cent. of employees.

The Atlantic Coast Line Railroad (4,138.87 miles, 17,512 employees) established its relief association April 1, 1899; but this company already had a relief and hospital department under the previous title of the corporation, the Plant System. The rates of contributions and benefits are so near those of the Pennsylvania system that they need not be repeated. In 1903 there were 8,129 members, about 62 per cent. of the working force. The membership was distributed according to grades: general office and station employees, 23 per cent.; trainmen, yardmen, telegraphers, 23 per cent.; enginemen and firemen, 12 per cent.; machine and car-shop employees, 25 per cent.; track department employees, 17 per cent. Members of the family of an insured employee are permitted to enter a company hospital for needed treatment at reduced rates. The release clause is very explicit:

Acceptance by the member of benefits for injury operates as a release and satisfaction of all claims against the company for damages arising from or growing out of such injury. If any suit is brought against the company for damages all obligations of the Relief Department will be forfeited. If a claim for damages is settled without suit or by compromise, such settlement will release the Relief Department and the company from all claim.

The Chicago, Burlington and Quincy Railroad Co. (8,324 miles, 38,350 employees). The relief department was established March 15, 1889, and went into operation June 1 of the same year. The basis of contributions and benefits is similar to that of the Pennsylvania system. Arrangements are made for commutation of benefits in case of grave injury on payment of a lump sum, the injured man being required to sign away his right to bring suit under the employers' liability law. The sums paid range from \$800 to \$3,200 for loss of hand or foot above the wrist or ankle, or twice these amounts in case of loss of both hands or both feet, or of one hand and one foot. Membership may be continued after leaving the service, in case of three years' of previous service and one year of membership in the department. The maximum age of admission is 45 years. The rate of mortality is stated to be 8.7 per 1,000 per annum. The receipts of the fund from the establishment of the plan to December 31, 1903, were: \$4,368,215.69, of which the employees paid \$4,197,912.42, the company \$42,532.94 for deficiencies, and \$127,770.33 came from other sources. The average annual receipts have been from all sources, \$337,489.90. The total disbursements since the beginning, \$4,592,579.36: for accident benefits, \$1,432,372.94; sickness, \$1,127,247.00; death, \$1,167,019.50; operating expenses, paid by the company, \$865,939.92; the average disbursements per annum, \$332,504.71. The company is custodian of the funds and advances money to meet obligations. Surplus funds are invested in securities. The membership on December 31, 1903, was 22,141, about 58 per cent. of the working force. Of the engineers 95.97 per cent. were members; of firemen, 96.56 per cent.; of conductors, 90.09 per cent.; of brakemen, 96.39 per cent.; of trainmen, enginemen, and yardmen as a group, 95.59 per cent.; of all others 48.87 per cent.

The objections of many of the employees of this road to the feature of the scheme requiring an injured man to sign away his rights to sue the company under the liability law in order to enjoy benefits from the fund which was created chiefly by the contributions of the workmen have grown more strong with

time and led to the introduction into the legislature of Illinois of a bill to make such use of the relief fund illegal:¹⁰

providing that in all actions hereafter brought against any employer to recover damages for personal injuries to an employee or where such injuries have resulted in his death, no contract of employment, insurance, relief benefit, pension, or indemnity for injury or death entered into or on behalf of any employee, nor the acceptance of any such insurance, relief benefit, pension, or indemnity by the person entitled thereto, shall constitute any bar or defense to any action brought to recover damages for personal injuries to or death of such employee, and providing that upon the trial of such action against such employer the defendant may set off therein any sum such employer has contributed toward any such insurance, relief benefit, pension, or indemnity that may have been paid to the injured employee, or in case of his death, to his personal representative.

The lower house adopted this bill by a very large majority vote on February 28, 1907.

The Lehigh Valley Railroad Co. (1,398 miles, 18,621 employees), established a relief department January, 1878, to provide indemnity for accidents, but without sickness insurance. There is no medical examination for admission, nor age conditions. Officers of the company administer the plan, and the company pays the costs of management. The fund is replenished by assessments levied at intervals of four or five months and not to exceed \$3 in any case. The company pays an amount equal to the sum of the contributions of the employees. Benefits are paid on the basis of the contributions to the credit of each member at the time of injury. Employees receive accident benefits, at the rate of three-fourths of the amount of contributions for the call during which injury occurred, for every week day, exclusive of holidays, for a maximum period of 9 months, if disability continues so long. A burial benefit of \$50 is paid, and the family of the deceased employee receives an allowance for every working day, at the rate of three-fourths of the amount of his contributions for 2 years. The cost of surgical and medical care is deducted from this payment. Artificial limbs are paid for out of this fund. Contributions are not refunded whether

¹⁰ 45th Assembly, House Bill 16, February, 1907.

the employee is dismissed or leaves the service voluntarily. The total receipts from the beginning to 1903 were \$938,796.52, of which the company paid one-half. The average annual receipts were \$36,107.56; total disbursements during the period, \$924,236.35; average for each year, \$35,547.55. Membership in 1903 was 6,505, about 35 per cent. of the entire working force: employees in train service, enginemen, firemen, conductors, brakemen, 80.9 per cent.; maintenance-of-way, 31.3 per cent.; maintenance of equipment, 32.1 per cent. It may be noted here that this company accepts the principle of paying half the cost of accident insurance in addition to paying expenses of administration of the fund.

The Long Island Railroad Co. (391.76 miles, 5,415 employees), organized its department January 1, 1886. The fund is administered by the president of the company and eight others, of whom five are elected by the employees and three are appointed by the president. The company pays the salary of the secretary, interest on funds, and furnishes office room. The membership dues are based on salaries and deducted from the payroll.

Members in Class I, with a salary of \$60 and over per month pay \$1 monthly dues and receive weekly benefits of \$9; the death benefit in this class is \$400. In Class II, wages \$40 to \$60, dues are 75 cents, benefits \$6.75, and death benefit \$300. In Class III, the wages are \$40 and less, the dues 50 cents, the weekly benefit \$4.50, and death benefit \$200. Benefits begin on the eighth day and continue six months. The total receipts since the establishment of the fund have been \$382,395.00; the average per year, \$21,244.17. Receipts for the year ending January 31, 1904, were \$58,884.32; total disbursements, \$367,233.00; average per year, \$20,401.83. Payments during the year ending January 31, 1904, were \$42,186.86: disablement from accidents, \$10,373.34; natural causes, \$15,011.37; death benefits, accidents, \$7,300, natural causes, \$9,300. Stationery and printing cost \$202.15. The membership was 4,700, about 87 per cent. of the total working force. The annual rate of mortality per 1,000 was 14.

The purely relief department roads hereinbefore discussed represent an aggregate of 31,000 miles of roadway, or about 15 per cent. of the total railway mileage of the United States, with employees numbering 318,000, or about 24 per cent. of the total number of railway employees in the country, and an insurance membership of 206,000 employees, or practically 65 per cent. of the total number of employees identified with the service of the roads involved; and this membership percentage would be largely increased were the computations based on the exclusion of non-membership employees, who are so because of ineligibility for membership, owing to age or physical disqualifications. The combined average annual disbursements of these departments aggregate about \$2,230,000 while their combined disbursements since organization approximate \$37,150,000.¹¹

Pension schemes of railroads.—The first railway corporation to establish a pension fund was the Baltimore and Ohio (October 1, 1884). The present standard of pension funds was established about the year 1900. The following table presents the essential facts.¹²

TABLE V

GROUP	NO. EMPLOYEES	RETIREMENT AGE		ENTRANCE AGE
		Voluntary	Involuntary	
Group A.....	126,799	61-69	65-70*	35-40
Group B.....	46,378	under 65	65	45
Group C.....	2,678	under 60	60	.....
Group D.....	4,454	60-64	65	35-45
Group E.....	11,953	65-69	70	35-45
Group F.....	228,040	65-69	70	35
Group G.....	33,307	60-69	70	35

* 70 sedentary; 65 active.

In Group A were the following roads: Atlantic Coast Line; Houston and Texas Central; Illinois Central; Oregon Railroad and Navigation Co.; Oregon Short Line; San Antonio and Aransas Pass; Southern Pacific; Union Pacific. In Group B: Baltimore and Ohio. In Group C: Bessemer and Lake Erie (in connection with Andrew Carnegie Endowment Fund). Group D: Buffalo, Rochester and Pittsburgh. Group E: Central of New Jersey. Group F: Chicago and Northwestern; Pennsylvania System, east and west; Philadelphia and Reading. Group G: Delaware, Lackawanna and Western. The Atchison, Topeka and Santa Fé road established its system in 1906.

¹¹ Riebenack, *op. cit.*, p. 77.

¹² Riebenack, *op. cit.*, p. 9, addenda.

There were, in the year 1903, 16 such organizations in operation and 2 in preparation. The roads having such departments had more than 50,000 miles of railway, or about 24 per cent. of the total railway mileage of the country, and about 500,000 employees, 38 per cent. of the working force. The annual appropriations were not over \$1,350,000. Eight of the roads had set aside a fund of about \$600,000. Twelve of the roads had expended, up to the end of 1903, \$2,500,000 and the companies had on their rolls 3,200 pensioners. In the United States the beneficiaries make no contributions to the funds; the corporations meet the entire expense. The income is derived from the interest on a definite sum which is made the basis of the plan, and additional appropriations are made as required. In some cases the company simply assumes responsibility for a maximum annual disbursement.

The objects of the departments are uniformly to provide for compulsory retirement from service at 65 or 70 years of age, with anywhere from ten to thirty years' continuous service, on a fixed pension allowance, computed, usually, at 1 per cent. of the average monthly pay for the ten years next preceding retirement, for each year of service. Involuntary or compulsory retirement takes place between ages 65 and 70, and voluntary retirement, growing out of incapacitation, between ages of 61 and 69 years.¹³

The plans devised by the Baltimore and Ohio and by the Pennsylvania companies are models for the others. In the American schemes all employees are included without regard to grades and classes.

The Massachusetts Labor Bulletin, January, 1907, presents a table (Table VI) which shows the results of the various railway pension systems so far as known from reports then published.

In the typical system the pension is optional with the road and no definite sum is promised. Mr. Riebenack interprets the policy in this language:

It stands for an annual allowance of money . . . without an equivalent in labor or otherwise—generally, however, in consideration of past services. The pension allowance is purely an optional railway disbursement from railway revenue exclusively, the employee making no contribution whatever to the scheme, which is absolutely subject to company direction and control.

¹³ *Ibid.*, p. 132.

TABLE VI

COMPANIES	COMPANY PAY- MENTS TO FUND SINCE INAUGURATION	EXPENDITURES FOR ALLOWANCES FOR PENSIONS SINCE INAUGURATION	NUMBER OF PEN- SIONERS CARRIED AT END OF 1905	AVERAGE AGE OF RETIREMENT		AVERAGE LENGTH OF SERVICE OF THOSE RETIRED		NUMBER OF DEATHS SINCE INAUGURA- TION
				Years	Months	Years	Months	
Atlantic Coast Line Ry. Co.	\$ 13,587.56	\$ 10,070.46	39	70	...	28	6	9
Baltimore & Ohio Ry. Co.	873,300.00*	829,741.91*	377*	66*	5	...	..	480*
Buffalo, Rochester & Pittsburgh Ry. Co.	59,000.00*	2,868.71*	8*	64*	6	22*	1½	...
Chicago & N. W. Ry. Co.	276,441.26	276,441.26	279	69	..	33	..	56
Delaware, Lackawanna & Western R. Co.	78,863.93	78,863.93	146	66	..	35	..	26
Houston & Texas Central R. R. Co.	11,101.43	11,101.43	24	64	6	34	..	2
Illinois Central R. R. Co.	259,000.00†	70,856.20†	159†	66	10	33†	3	20†
Oregon Railroad & Navigation Co.	50,000.00	2,002.70	4	76	..	24	..	...
Oregon Short Line R. R. Co.	3,133.55	3,133.55	10	68	...	26	..	...
Pennsylvania R. R. Co.: East of Pittsburgh.	2,032,945.42†	2,004,087.59†	1,810	71	3	34	2	890
West of Pittsburgh.	645,474.04§	634,397.55§	656	71	1	33	11	215
Philadelphia & Reading Ry. Co.	19,073.19†	19,073.19†	89†	...	..	...	..	3†
Union Pacific R. R. Co.	30,492.58	39,492.58	63	68	..	30	..	5
Canadian Pacific Ry. Co.	410,000.00*	26,785.01*	142	67	5	18	5	29**

* Data to June 30, 1905, end of fiscal year.

† Returns for year ending December 31, 1903.

‡ Includes \$28,857.83, department operating expenses.

§ Includes \$11,166.49, department operating expenses.

** Up to December 31, 1905.

Control is exercised either through an autonomous department or directly by officers of the company. Being not a legal contract but a gratuity, it has only such assurance of permanence as comes from the will of the corporation. It does not seem probable, however, that the corporations will recede from their plans, because these are so advantageous to the company; but there is no legal obligation to continue. No definite amount is promised and usually provision is made for ratable reductions in pensions when the income does not cover the expenses. Allowances are as a rule based on age and service. Lump sums are not paid in settlement of claim, and allowances cease at death of the pensioner. The aggregate mortality of pensioners since the establishment of the schemes up to the end of 1903 was 1,150.

Since the system adopted by the Atchison, Topeka and Santa Fé R. R. Co. is one of the most recent developments of the pension idea it is herewith presented in some detail.

Of the motives and advantages of this scheme Mr. George E. Tunell, secretary of the Board of Pensions, says:

The pension system will relieve the strain and stress of life's struggle before, as well as after, retirement. . . . While the pension allowances in themselves will not be large enough to enable anyone to live in the manner of life maintained before retirement, they will be a substantial help, especially to those who have received small wages. It was not designed that the pension system should remove the necessity for saving. It was expected that it would act as another inducement to thrift and industry, and that, by giving new hope of an independent old age free from want, an additional incentive would be given to work and save. To be near a goal that is worth while should make all eager to reach it.

The pension system the company has devised is the most liberal in existence, and it marks a big advance over all others now in force. It may be of interest to point out a few of the features in which our system departs from those of all other railroads.

On the Santa Fé no additional restrictions are placed on the employment of new men, and no employee will be arbitrarily retired simply because of having reached the age of 65, or 70 years, as the case may be. Employees will be retained in the service as long as they are able to perform their duties satisfactorily, or some new duty that is less arduous and exacting. Retirement will be for incapacity alone, the Board of Pensions deciding when a man is too old to remain in the service.

The Santa Fé plan also differs from all others because it distinguishes between the men who have received small salaries and those who have enjoyed large salaries. It discriminates between those whose opportunities to lay something by have been limited and those who could put something aside for a rainy day and yet have many of the comforts of life. To all whose salaries have been moderate our system is more generous than any other; first, because it gives the pensioner of small salary a larger percentage of his whole salary for each year of service; and, second, if this does not amount to at least \$20 a month, it is raised to \$20, this being the smallest pension the company will give any pensioner. An illustration will show how much more generous our system is. Under the system in force on any other railroad a man who had worked for twenty years at a salary of \$50 a month would receive a pension of \$10 a month, while under our system he would receive \$20 a month. On the Santa Fé there will be neither very small nor very large pensions, because of the minimum and maximum provisions of our system. Under all other systems there is no limit either to the smallness or the bigness of pension allowances. No other system draws a line between those having good opportunities to save and invest and those who have not had such opportunities.

Our system is also unique in recognizing exceptionally long and efficient service. The Board of Pensions has power to increase the ordinary allowances by 25 per cent. for unusual merit.

The amount of pension any person may be granted by the Board of Pensions will depend on three conditions: (1) The amount of highest average monthly pay received during any consecutive ten years of service; (2) the number of years in the service of the company or of its auxiliary companies, and (3) the character of the service taken in connection with the length of the service.

The lowest pension is \$20 and the highest \$75 a month. No pension is allowed to any officer or employee who shall make or enforce any claim against the company for damages by reason of any injury or accident occurring within three years prior to the date when such employee shall be retired or leave the service. A person who leaves the service for two months loses his claims and must enter as a new employee. No person who becomes an employee after the age of fifty is entitled to a pension. The rate of pension is reckoned by counting for each year of service an allowance of $1\frac{1}{4}$ per cent. of the first fifty dollars of the highest average monthly pay of the officer or employee during any consecutive ten years of service, and, in addition, $\frac{3}{4}$ of 1 per cent. of any excess of such highest average monthly pay over fifty

dollars; but no pension must be less than \$20 nor over \$75 a month.¹⁴

CRITICISM OF RAILWAY RELIEF FUNDS

The fairest starting-point for a criticism of the railway schemes of industrial insurance is the recollection of the condition of affairs in railway occupations before these plans were introduced, and a survey of the general neglect of this obligation by other employers at this time in the United States. Judged in this way the managers of the great transportation corporations deserve credit for their humanity, foresight, and energy in establishing and administering these funds. They represent an enormous advance upon anything hitherto known in this country, and they point the way to further progress. Their example is already stimulating other employers to think and act in the same direction. Their carefully kept records furnish a fund of statistics of experiences which will aid in improving future schemes. If at certain points we compare these pioneer methods with those more advanced in Europe, and especially in Germany, it is only because progress is desirable and comes partly by comparison; and because it would be fatal to settle down into national self-congratulation and stagnation when the fact is that we are only in the infancy of the movement. That the rail-

¹⁴ Since the Grand Trunk Railway has important business in the United States its recent scheme of pensions, which went into effect January 1, 1908, deserves mention here. For many years the Grand Trunk Railway Insurance and Provident Society has furnished sickness and accident insurance and a death benefit. The new old-age pension plan has many excellent features. Officers and employees are to be compulsorily retired on reaching the age of 65 years, except by special action. A disabled employee may be retired at 60 years after 20 years of service; and any employee, after a service of 10 years may be eligible for a pension during disability. The rate of pensions is fixed by taking 1 per cent. for each year of continuous service on the highest average rate of pay during any ten consecutive years of service. Thus an employee in continuous service from the age of 30 years to 70 with the highest average rate of wages between 40 and 50 of \$1,000.00 per annum, would receive forty one-hundredths of \$1,000.00 or \$400.00 per annum. No pension is to be lower than \$200.00 per annum. No employee who sues the company for damages on account of personal injuries sustained by him in the course of his service will have any claim for pension. No legal right to hold a position or to receive a pension is given by this plan. The pension fund is administered by a pension committee.

way companies have found it economically possible and even profitable to go so far is a complete refutation of the oft-repeated assertion that, beyond paying market wages nothing further can be done; and the humanitarian reasons already given by the managers of these funds puts to silence the claim that social care of wage-earners is no part of the duty of employers. A breach is already made in the Chinese wall of the antiquated "economic-man" theory; an opening is already happily made for still larger applications of the same principles. Our criticisms are designed to show in what directions the movement will logically and naturally carry us.

Motives of the companies.—As the managers of these companies must report to the stockholders they have thus far aimed to show that the expenditures on insurance made by them were justified on the ground that they increased the efficiency of the employees and so tended to produce higher dividends on investments. But there is also recognition of social obligation of capitalists who are in places of power.

The railroads began and are still moving on the principle that there is indissoluble mutuality of interest between employer and employee These provisions, so evidently actuated by truly humane purpose, have inevitably resulted in improved mental, moral, and physical conditions, thus developing a reciprocal feeling between capital and labor, and at the same time energy has been vitalized and ambition stimulated among the rank and file of railway employees.¹⁵

As will be shown, these desirable results have been achieved chiefly at the cost of the employees; the aid of the companies being valuable but financially subordinate in case of sickness, accident, and death benefits. In case of old-age pensions, however, the burden is carried entirely by the companies. But from any point of view the employees have great advantages. They are interested in the administration of the relief departments; they are directly represented by their elected representatives on the advisory committees; the department serves as a friendly bond between workmen and employers; misery and sorrow are mitigated; the health and force of the workmen are improved,

¹⁵ Riebenack, *op. cit.*, p. 8; see also address of J. C. Bartlett, in 1897, before the St. Louis Railway Club.

and labor becomes thereby more productive and remunerative. Ordinarily the employee when injured prefers to accept the certain, and considerable indemnity offered in ready cash by his fund to the uncertain outcome of a costly legal process which will make him lose his occupation when restored to health or his pension in old age. The manly virtues are fostered, since the workman no longer is obliged to accept charitable relief as in former days. An unsystematic, unorganized, and unequal charitable relief is displaced by a purely economical method, in which the burdens are equitably distributed over many, and the advantages may be taken without loss of self-respect. After a long illness the employee does not return to work discouraged and enfeebled by a load of debt, with his savings dissipated by expenses. That part of his earnings which might in many cases have gone for drink or other useless consumption under this system goes to purchase insurance against a time of need. The provision for immediate medical and surgical aid helps to prevent much illness, and men are not driven to return to work before it is safe, since they and their families have means to meet the more urgent needs of existence. At first the administrators and clerks were unwilling to accept the burden of caring for the fund, because it demanded many new duties and extra work; but gradually the manifest advantages won their approval.

Security of funds and payments of indemnities.—There seems to be no ground for doubt that the funds are secure and that the promises of the relief department will be met. The companies guarantee the financial obligations and have a plan which provides for payments as they are required by the contracts.¹⁶ The significance of this fact cannot be too strongly emphasized. It means that only under expert management and in connection with very large associations of men is social insurance real “assurance.” The honesty and efficiency of administration are here guaranteed as substantially as they can be made under private management; and the publicity of accounts is further security for sound business management. Much of the

¹⁶ Riebenack, *op. cit.*, p. 32; Willoughby, *op. cit.*, pp. 310, 315.

subjective value of insurance to working-men lies in the certainty that what they pay out will sacredly be kept for the purpose for which they have made sacrifices and parted with their hard-earned money.

Adaptation.—The division of the members into five classes is a suitable means for its purpose which is to make

the expenses and benefits of insurance proportionate to the abilities and needs of the different classes of employees. Further elasticity has been secured by the provision in the constitutions of practically all the departments, that members may, if physically sound, be assigned to a higher class than that to which the amount of their wages would entitle them, and by the opportunity offered them to take out additional death benefit insurance.¹⁷

Adequacy.—The indemnities, as already shown in the tables, for disablement for accident and sickness, and the death benefits from both causes are sufficient to meet moderate demands.

Equity of the burdens.—In the description already given the distribution of cost of insurance for sickness, accident, death, old age, and incapacity, the division and placing of the burden have been stated. In one respect the railway corporations seem to have the most liberal plan yet offered—they pay the entire cost of old-age pensions. The only shortcoming here lies in the guarantee of specific amounts; “ratable reductions” in the payments of pensions are provided for. The legal basis of the system is not absolutely reassuring, since all rests on the good-will of the company, and no contract or legal obligation exists. In a country with a completely developed system of insurance the provision for invalidism and old age is placed on the solid foundation of a specific legal obligation and funds are provided, under public control, to meet the obligation. There is little probability, however, of the abandonment of these schemes by any railway corporation.

Why do the companies prefer to assume the entire cost of the invalidism and old-age pensions? The usual answer is that if the employees pay part of the premiums they must be admitted to share in the administration, and this might complicate relations with the trade-unions. Perhaps there are other reasons. Perhaps the companies are not ready to make contracts abso-

¹⁷ Willoughby, *op. cit.*, p. 310.

lutely binding them to provide pensions in the future. During the time of experiment the management must feel its way along and modify measures according to experience. It is not necessary to keep a very large fund on hand for accident or sickness insurance; the income covers the expenditures each year or within a relatively short period; but in the case of pensions one must reckon with long periods for which large funds must be held in reserve.

The accident insurance is closely connected with sickness and life insurance, and this fact somewhat complicates the situation, especially as the employing company is legally liable for disability only where it is due to the negligence of the employer. In criticism of the schemes under review we must keep in mind the employers' liability law elsewhere discussed. It could hardly be expected that a private company would move very far in advance of the requirements of law. Indeed it may be said to the credit of the companies that they have voluntarily organized and substantially aided the departments of accident insurance without direct legal compulsion. At a time when the narrow legal provisions of the employers' liability law were generally regarded as substantially equitable, when it was supposed that each employee individually assumed the ordinary risks of a hazardous occupation in the act of accepting employment and was expected to provide for himself out of wages and savings, it was an almost revolutionary step for an employing corporation to admit that this ethical and legal rule was not satisfactory, and to make at least partial provision for indemnities by associated action with the workmen and by making considerable contributions to the funds. But as the community comes to discover and accept the principle of "professional risk," that a business which does not make good, as far as indemnity in money can do it, the losses of human energy as well as of broken and worn out machinery, is parasitic and socially bankrupt, the schemes of the railroad companies will no longer satisfy the reason and conscience of men. According to the new ethical principle which has practically won acceptance in Europe, the employers should pay all the cost of accident insurance, and the question of

liability for negligence should not be considered except where there is manifest criminal action. But these railway schemes compel the men to pay much the larger part of the premiums out of their wages; and then they are liable to lose their claim upon the fund if they claim their legal rights under existing liability laws. Indeed it was chiefly to escape from the annoyance and cost of damage suits that the scheme was founded. There are antagonistic opinions on this point, and in fairness both must be stated.

Mr. Riebenack states the side of the corporations thus:

The applicant for fund membership enters into an agreement with the fund to accept, in the event of sustaining disablement by injury while in the service, and in the performance of service duties, the accident benefits specifically prescribed in fund regulations. This is a distinct agreement, with a good and valid consideration, made between proper contracting parties, and, therefore, invested with due legal status. . . . This manner of fund agreement does not deprive the member from instituting legal proceedings instead of taking the rate of compensation offered by the fund. It does provide, however, that when the member disregards his plain obligations under its terms, he thereupon forfeits his rights to fund benefits, and the question of company compensation will then depend wholly upon the merits of the case from a purely legal standpoint.¹⁸

The same opinion is defended by E. R. Johnson, in *Railway Departments for the Relief and Insurance of Employees*, 2d ed., March, 1900, p. 99; and by J. C. Bartlett, in *Railway Relief Departments*, 1897.

Willoughby represents another point of view:¹⁹

Even the little contribution that they (the corporations) do make is more than offset by the fact that the companies have used these departments to protect themselves against suits for damages on the part of their employees. The regulations of all the departments stipulate that members, or their beneficiaries, must elect, whether they will sue the companies for damages on account of the injuries they have received, or accept the benefits of the relief fund. If they choose the former, they thereby forfeit all claim to the latter, and the acceptance of the latter acts as a renunciation of all legal claims they may have against the companies. The departments are largely supported by the members themselves, and the receipt of benefits in return should in no way abridge their legal rights. The provision

¹⁸ Riebenack, *op. cit.*, p. 33.

¹⁹ *Working-men's Insurance*, p. 316.

that the benefits, as far as they are paid from contributions made by the roads, should be considered as a part payment of any damages that might be recovered against the company might possibly be defended, but that the act of bringing suit should work a forfeiture of acquired rights is thoroughly immoral and contrary to public policy. The men have made payments for a particular purpose. That to cancel their rights is an injustice, it would seem must be beyond question.

The objections of the employees are gathering force for an attack on these schemes on grounds similar to those urged by Willoughby. Thus Mr. E. E. Clark, former representative of the Order of Railway Conductors, has said:

The employees of the companies which conduct such departments in speaking when they are not afraid to speak plainly generally express the conviction that in so far as an employee who is a member of the department is concerned, he feels that if he should withdraw from it he would incur the displeasure of his employers, and that, when the opportunity is offered, a fellow employee who retained membership in the department would be given a preference over him, and that so far as applicants for employment are concerned, the man who is not ready and willing to join the relief department, is not needed and does not secure employment.

The applicant for membership in a relief department is required to execute a contract that, in the event of his being injured in the performance of his duties and of his accepting the benefits provided in the department for such cases, he thereby releases the employing corporation from all liability under the statutory or common law. This means that if a member of the department is injured through neglect of the company or of its agents and, believing that no permanent disability is to ensue, he accepts the first month's benefits provided by the relief department and tendered by the company and, later, finds that he is disabled for life or his death ensues, all efforts to recover damages from the company are forestalled by the company pleading the contract which the employee signed when becoming a member of the relief department.²⁰

Mr. Clark admits that the contract is legally valid under the common law, but claims that it is unjust and cites the Iowa law forbidding the making of such contracts as the right method of correcting the evil. The bill introduced by employees of the Chicago, Burlington and Quincy road in the Illinois legislature of 1907 shows that this revolt is general and before long will be successful. The relief departments must be fair and not take advantage of the employees in their economic need of employ-

²⁰ *National Civic Federation Review*, March, 1905.

ment to force upon them an inequitable contract under the pretense that they are free to accept or reject it. It is evident that this dispute would cease if the principle of the British compensation law or some insurance law requiring the employers to pay at least half the premiums and all expenses were to be introduced.

The necessity for accident insurance is made plain by the statistics of casualties in the railway service. Only in this occupation have we approximately accurate records, and this because the federal law applied through the Interstate Commerce Commission makes reports of accidents obligatory. The report of the commission for 1904 shows the number of railway accidents from 1888 to June 30, 1904. The number of employees killed was: in 1888, 2,070; in 1904, 3,632; injured: in 1888, 20,148; in 1904, 67,067. There has been an actual increase in every class of casualty, with employees, passengers, and others. The use of safety devices of certain kinds, introduced after long opposition and delay, has diminished the frequency of casualties resulting from coupling and uncoupling cars. But from other causes the danger of accident has increased both relatively and absolutely. "In 1894 the liability to fatal injury to employees was as 1 to 428; in 1904 it stands as 1 to 357. If this comparison be made for trainmen, the liability to fatal accident in 1894 was as 1 to 156; in 1904 it was as 1 to 120." If the corporations were legally obliged to pay all the premiums for accident insurance, as is done in Germany, instead of throwing most of the cost on their employees, this increase of disabling and fatal casualties would be reduced. The managers would discover devices for preventing this economic leak. So long as they can compel the workmen to bear the larger part of this burden this incentive to discover and introduce safety appliances is wanting.

The question is often discussed whether membership is compulsory or voluntary; for the situation is all the more irritating to the men if they believe that they are economically compelled to sign contracts which they regard as inequitable. The testimony of Mr. E. E. Clark places beyond question the fact that the employees do regard themselves obliged to become members

even against their judgment and desire as a condition of securing or retaining employment or promotion. Mr. Riebenack's statement may be regarded as the official view of the companies:

Membership is purely voluntary. As a matter of fact compulsory membership is prohibited by the United States Arbitration Act of June 1, 1898. It is sometimes held that membership is nominally voluntary but practically compulsory. This view undoubtedly rises from the circumstance that the companies, in accordance with the principle observed by all large business undertakings requiring the constant employment of large numbers of men, exercise the generally conceded right to decide upon the physical fitness and general qualifications of applicants for positions in their service. In carrying out this principle the discriminations made between applicants may appear to the uninformed to indicate a disposition to enforce compulsory membership. . . . This is an erroneous conclusion.²¹

In another place he says:

In reductions of force, temporary or permanent, preference as to retention in the service will be given members of the Relief feature, other things being equal, over those in the same grades of service who are not connected with said feature.²²

It is precisely this kind of preference which the employees feel to be "compulsion."

*Age classification in relation to death benefits.*²³—The premiums paid by the men are classified by wage-earnings but not by ages. The fund thus raised is held for payments of indemnities not only for sickness and accident but also for death; and in this latter fact we come into the field of life insurance. It is a generally accepted principle of life insurance that premiums ought to be graduated according to age, since it is unjust to compel a young man to pay as much as an older man. Perhaps it would be difficult in practice to grade the premiums by ages so long as all are paid confusedly into one fund; and this would seem to be an objection to such confusion. An element of unfairness remains which could be removed only by treating each kind of insurance apart, and fixing the premiums to meet the average risk by age and by form of occupation.

That part of the fund which is paid by the employees for life insurance proper (death benefits) was paid with the hope and expectation and understanding that it should be available

²¹ *Op. cit.*, p. 32.

²² *Ibid.*, p. 45.

²³ *Ibid.*, pp. 311, 312.

for their families in case of death. The part paid for protection in case of disablement by accident or illness was contributed only to meet the needs of the current year. When the corporations upon discharging a man decline to reserve for him any equitable claim on the fund they violate a plain moral right which life insurance practice and legislation have long recognized. That the workman is required to sign away this claim in advance when he enters the relief department does not alter the fundamental moral equities of the situation. Here also the failure to distinguish between accident and sickness insurance on one side and death benefits on the other leads to error and wrong. It is fair now to quote the defense made by the official representative of the railway departments:

No provision is made for the return to members of the relief fund who leave either the service or the fund, of any proportion of their contributions, for the reason that during their connection therewith they have been protected against sickness and accident at a minimum cost, and to make repayments would necessitate an increase in rates, which would entail added expense to all members. It is also a fact that the laws of some states prohibit the continuance of fund death benefits after employees leave the service of the interested corporation, as being an infringement on and violation of existing legislation for the government of insurance practice.

In some companies the right to continue in the fund after leaving the service, on condition of regular payments of dues, is recognized.

These criticisms, if valid, prove only that the schemes ought to be revised and improved; in spite of them it remains true that the relief departments secure accident and sickness insurance at relatively low cost and represent an important advance on the conditions before their establishment. The next step is to secure national and state legislation requiring the companies to furnish adequate insurance against loss by accident, disease, and invalidism due to the employment, on condition that they be released from further liability, except in case of wilful negligence and violation of laws requiring protective devices.